NHDES-W-06-012

Environmental

WETLANDS PERMIT APPLICATION

Water Division/ Wetlands Bureau Land Resources Management



Check the status of your application: www.des.nh.gov/onestop

RSA/Rule: RSA 482-A/ Env-Wt 100-900

Services

			Community Community States	Elle No.	
Adminisu <u>mov</u> e			Administrative	Oheck No.	
doly	Use Only		Only:	Amount	
				Imtials	
1. REVIEW TIME: Indicate your Review Time	below. To determine re	eview time, refe	er to Guidance Do	ocument A for instructions	
☐ Standard Review (Minimum, Minor o				w (Minimum Impact only)	
2. MITIGATION REQUIREMENT: If mitigation is required a Mitigation-Pre Applic if Mitigation is Required, please refer to the De	termine ir willigation is i	ur prior to subn Required Frequ	oitting this Wetler	ada Damiit Annii - C	
Mitigation Pre-Application Meeting Date ☑ N/A - Mitigation is not required	e: Month: Day:	Year:			
3. PROJECT LOCATION:	SALES FOR		F 18-11-11		
Separate wetland permit applications must be	submitted for each mun	icipality that w	etland impacts oc	cur within.	
ADDRESS: River Road			то	WN/CITY: Westmorela	nd
TAX MAP: BLOO	CK:	LOT:		UNIT:	
USGS TOPO MAP WATERBODY NAME: Unnam	ed Stream	□ NA	STREAM WATER	RSHED SIZE: 160 Ac	□ NA
LOCATION COORDINATES (If known): 42.97990	06,-72.460788		-L	☐ Latitude/Longitu	
E CHORELINE FRONTAGE.					
5. SHORELINE FRONTAGE:					
NA This does not have shoreline frontage.		RELINE FRONT			
Shoreline frontage is calculated by determining straight line drawn between the property lines,	both of which are meas	ances of the ac ured at the nor	itual natural navig mal high water lin	lable shoreline frontage a le.	ınd a
6. RELATED NHDES LAND RESOURCES M. Please indicate if any of the following permit ap To determine if other Land Resources Manage	ANAGEMENT PERMIT plications are required a	APPLICATION	NS ASSOCIATED	O WITH THIS PROJECT:	
Permit Type	Permit Required	File Numb		pplication Status	
Alteration of Terrain Permit Per RSA 485-A:17 Individual Sewerage Disposal per RSA 485-A:2 Subdivision Approval Per RSA 485-A Shoreland Permit Per RSA 483-B	☐ YES ☒ NO ☐ YES ☒ NO ☐ YES ☒ NO ☐ YES ☒ NO		_ APPF	ROVED PENDING COVED PENDING COVED PENDING COVED PENDING COVED PENDING COVED PENDING COVED	
7. NATURAL HERITAGE BUREAU & DESIGNO See the Instructions & Required Attachments designed.	NATED RIVERS: ocument for instructions	to complete a	& b below.		
a. Natural Heritage Bureau File ID: NHB <u>17</u>					
 Designated River the project is in ¼ mile date a copy of the application was sent N/A 	es of: Conneticut Riv e to the <u>Local River Mana</u>	er gement Adviso	ory Committee: M	; and onth: Day: Yea	r:

8. APPLICANT INFORMATION (Desired permit holder)			
LAST NAME, FIRST NAME, M.I.: Belanger, Kevin, J.			
TRUST / COMPANY NAME: NHDOT District 4	MAILING ADDRESS: 19	Base Hill Rd	-
TOWN/CITY: Swanzey		STATE: NH	ZIP CODE: 03446
EMAIL or FAX: kevin.belanger@dot.nh.gov	PHONE: 603-352	2-2302	
ELECTRONIC COMMUNICATION: By initialing here: KJB_, I he electronically	reby authorize NHDES to communic	ate all matters relati	ve to this application
9. PROPERTY OWNER INFORMATION (If different than	applicant)		
LAST NAME, FIRST NAME, M.I.:			
TRUST / COMPANY NAME:	MAILING ADDRESS:		
TOWN/CITY:		STATE:	ZIP CODE:
EMAIL or FAX:	PHONE:		
ELECTRONIC COMMUNICATION: By initialing here I h electronically			
10. AUTHORIZED AGENT INFORMATION			THE REPORT OF THE PROPERTY CONTRACTOR AND ADMINISTRATIC PROPERTY AND ADMINISTRATIC PROPERTY OF THE PROPERTY OF
LAST NAME, FIRST NAME, MI:	COMPANY	NAME:	
MAILING ADDRESS:	3		
TOWN/CITY:		STATE:	ZIP CODE:
EMAIL or FAX:	PHONE:	1	
ELECTRONIC COMMUNICATION: By initialing here, I hi		cate all matters relai	tive to this application
electronically		The second secon	The state of the s
 PROPERTY OWNER SIGNATURE: See the Instructions & Required Attachments document for c 	larification of the below statemer	nts	
By signing the application, I am certifying that:	A STATE OF THE PROPERTY OF THE		
I authorize the applicant and/or agent indicated on this upon request, supplemental information in support of	s form to act in my behalf in the p	rocessing of this	application, and to furnish
I have reviewed and submitted information & attachments		nd Required Attac	chment document.
3. All abutters have been identified in accordance with R	SA 482-A:3, I and Env-Wt 100-96	00.	
4. I have read and provided the required information out	ined in Env-Wt 302.04 for the ap	plicable project ty	pe.
 I have read and understand Env-Wt 302.03 and have Any structure that I am proposing to repair/replace was according to the structure of the structure. 			eau or would be considered
grandfathered per Env-Wt 101.47. 7. I have submitted a Request for Project Review (RPR) (SHPO) at the NH Division of Historical Resources to	Form (www.nh.gov/nhdhr/review) to the NH State	Historic Preservation Officer
with the lead federal agency for NHPA 106 compliance	e.	-	-
8 I authorize NHDES and the municipal conservation co			
 I have reviewed the information being submitted and the submission of falsified or management. 	nisrepresented information to the	the information is New Hampshire	true and accurate. Department of
Environmental Services is a criminal act, which may re 11. I am aware that the work I am proposing may require a		ormita which I am	racannaible for obtaining
12. The mailing addresses I have provided are up to date forward returned mail.	and appropriate for receipt of NH	IDES corresponde	ence. NHDES will not
	THE KING L	1117	5/2018
from ralepay	John Kallfelz	Data	- (018

MUNICIPAL SIGNATURES

12. (CONSERVATION COMMISSION SIGNATURE	
 Waives its right to intervene per RSA 	nitted plans accurately represent the proposed pro	
⊏	Print name legibly	Date

DIRECTIONS FOR CONSERVATION COMMISSION

- 1. Expedited review ONLY requires that the conservation commission's signature is obtained in the space above.
- 2. Expedited review requires the Conservation Commission signature be obtained **prior** to the submittal of the original application to the Town/City Clerk for signature.
- 3. The Conservation Commission may refuse to sign. If the Conservation Commission does not sign this statement for any reason, the application is not eligible for expedited review and the application will reviewed in the standard review time frame.

	13. TOWN / CITY CLERK SIG	NATURE		
As required by Chapter 482-A:3 (amended 2014), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.				
\Rightarrow				
Town/City Clerk Signature	Print name legibly	Town/City	Date	

DIRECTIONS FOR TOWN/CITY CLERK:

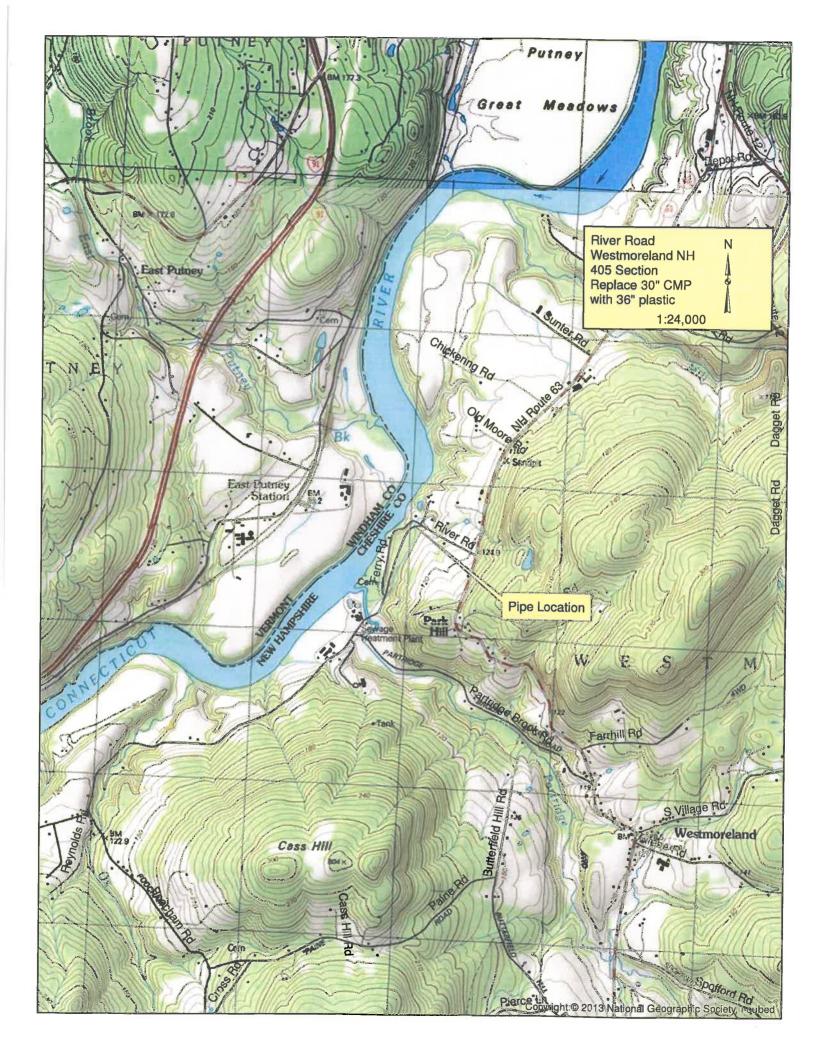
Per RSA 482-A:3.I

- 1. For applications where "Expedited Review" is checked on page 1, if the Conservation Commission signature is not present, NHDES will accept the permit application, but it will NOT receive the expedited review time.
- 2. IMMEDIATELY sign the original application form and four copies in the signature space provided above;
- 3. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
- 4. IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board; and
- 5. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

DIRECTIONS FOR APPLICANT:

 Submit the single, original permit application form bearing the signature of the Town/ City Clerk, additional materials, and the application fee to NHDES by mail or hand delivery.

14. IMPACT AREA: For each jurisdictional area that will be/ha	as been impacted provide so	uara fact and if					
Permanent: impacts that will remain after	the project is complete.						
Temporary: impacts not intended to remain	ain (and will be restored to pro PERMANENT	e-construction co	nditions) after the		ete.		
JURISDICTIONAL AREA	Sq. Ft. / Lin. Ft.			TEMPORARY Sq. Ft. / Lin. Ft.			
Forested wetland		☐ ATF			☐ ATF		
Scrub-shrub wetland		ATF			ATF		
Emergent wetland) .	ATF			☐ ATF		
Wet meadow		ATF			ATF		
Intermittent stream		ATF			ATF		
Perennial Stream / River	70 / 10	ATF		1	ATF		
Lake / Pond		☐ ATF		1	☐ ATF		
Bank - Intermittent stream	1	ATF		1	☐ ATF		
Bank - Perennial stream / River	. 1	☐ ATF	123	0 / 40	ATF		
Bank - Lake / Pond	1	☐ ATF		1	ATF		
Tidal water	1	☐ ATF		1	ATF		
Salt marsh		☐ ATF			ATF		
Sand dune	· ·	☐ ATF			ATF		
Prime wetland		☐ ATF			ATF		
Prime wetland buffer		☐ ATF			ATF		
Undeveloped Tidal Buffer Zone (TBZ)		☐ ATF	· · · · · · · · · · · · · · · · · · ·		ATF		
Previously-developed upland in TBZ		☐ ATF			- ATF		
Docking - Lake / Pond		ATF			ATF		
Docking - River		☐ ATF			ATF		
Docking - Tidal Water		☐ ATF			ATF		
TOTAL	70 / 10		1230	0 / 40			
15. APPLICATION FEE: See the Instruc	tions & Required Attachments	document for fu	rther instruction				
☐ Minimum Impact Fee: Flat fee of \$ 20							
☐ Minor or Major Impact Fee: Calculate							
	Temporary (non-docking)	1300 sq.	ft. X \$0.20 =	\$ 260			
Temporary (sea	asonal) docking structure:	sq.	ft. X \$1.00 =	\$			
Perr	manent docking structure:	sq.	ft. X \$2.00 =	_\$			
Projects pr	oposing shoreline structure	s (including do	cks) add \$200 =	\$			
			Total =	\$ 260			
The Application F	ee is the above calculated To	tal or \$200, whicl	hever is greater =	The Application Fee is the above calculated Total or \$200, whichever is greater = \$ 260			





WETLANDS PERMIT APPLICATION – ATTACHMENT A MINOR AND MAJOR - 20 QUESTIONS

Land Resources Management Wetlands Bureau





RSA/ Rule: RSA 482-A, Env-Wt 100-900

<u>Env-Wt 302.04 Requirements for Application Evaluation</u> - For any major or minor project, the applicant shall demonstrate by plan and example that the following factors have been considered in the project's design in assessing the impact of the proposed project to areas and environments under the department's jurisdiction. Respond with statements demonstrating:
1. The need for the proposed impact.
The existing pipe is in poor condition and needs replacement.
2. That the alternative proposed by the applicant is the one with the least impact to wetlands or surface waters on site.
The alternative proposed will upsize the pipe and improve capacity. It will also improve the ability of the pipe to pass debris and lessen the potential for future flooding.
The department has evaluated the site to efficiently / effectively access the site while reducing impacts to the maximum extent possible.

3. The type and classification of the wetlands involved.
R2UB1, BANK
4. The relationship of the proposed wetlands to be impacted relative to nearby wetlands and surface waters.
The unnamed stream is a tributary that flows to the Connecticut River, which is a designated river.
5. The rarity of the wetland, surface water, sand dunes, or tidal buffer zone area.
The unnamed stream is not considered a rare resourse.
6. The surface area of the wetlands that will be impacted.
70 sf of permanent riverine impact
1230 sf of temporary bank impact

7. The impact on plants, fish and wildlife including, but not limited to:	
a. Rare, special concern species;	
b. State and federally listed threatened and endangered species;	
c. Species at the extremities of their ranges;	
d. Migratory fish and wildlife;	
e. Exemplary natural communities identified by the DRED-NHB; and f. Vernal pools.	
a. No rare or special species of concerns were identified through a DNCR - NHB search	
b. Several state threatened and endangered species were identified through a DNCR - NHB search: balsam groundsel (T), brook lobelia (T), shining ladies'-tresses (E), and Virginia stickseed (T). No Federally listed species were identified through the NHB search Through coordination with Amy Lamb at DNCR it was determined that the site was dominated by invasive vegetation due to the highlighy distrubed soils and erosion and that the project footprint would unlikely impact rare plants. NHB did not have any concerns with the listed threatened and endangered plants listed after reviewing the site and proposed work.	
Through consultation with the US Fish and Wildlife service's IPaC review the Federally listed Northern Long-eared Bat was listed. As the project is not federally a 4(d) consultation form was completed and submitted to ACOE. US Fish & Wildlife do not report any known hibernacula, maternity roost trees, nor known sties within Westmoreland. It was also determined that the 30" cmp is not suitable habitat for NLEB as it is so small. No trees greater than 3 ft dbh will be cut down.	
c. No species at the extremeties of their ranges were identified in the NHB or IPaC search.	
d. the unnamed brook is not designated for Essential Fish Habitat. No migratory fish or wildlife were identified in the NHB or IPaC search.	
e. Through the NHB search the Calcareous riverside seep natural community was identified as being within / near the project area. NHB did not have any concers that the project would impact the natural community after reviewing the project.	
f. No vernal pools were identified within the project area.	
8. The impact of the proposed project on public commerce, navigation and recreation.	_
	_
There will be a short duration road closure to replace the pipe which will impact travel.	
	_
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10. The extent to which a project interferes with or obstructs public rights of passage or access. For example, where the applicant proposes to construct a dock in a narrow channel, the applicant shall be required to document the extent to which the dock would block or interfere with the passage through this area.
The project will improve the safety of the public highway.
11. The impact upon abutting owners pursuant to RSA 482-A:11, II. For example, if an applicant is proposing to rip-rap a stream, the applicant shall be required to document the effect of such work on upstream and downstream abutting properties.
The increased pipe size will increase flow capacity and improve the ability of the pipe to pass debris and reduce the potential for flooding.
12. The benefit of a project to the health, safety, and well being of the general public.
Improved Highway Safety.

13. The impact of a proposed project on quantity or quality of surface and groundwater. For example, where an applicant proposes to fill wetlands the applicant shall be required to document the impact of the proposed fill on the amount of drainage entering the site versus the amount of drainage exiting the site and the difference in the quality of water entering and exiting the site.		
The quality should be the same before and after the project.		
14. The potential of a proposed project to cause or increase flooding, erosion, or sedimentation.		
The project should not increase the potential for flooding or erosion and sedimentation.		
15. The extent to which a project that is located in surface waters reflects or redirects current or wave energy damage or hazards.	y which might cause	
N/A		

16.	16. The cumulative impact that would result if all parties owning or abutting a portion of the affected wetland or wetland complex were also permitted alterations to the wetland proportional to the extent of their property rights. For example, an applicant who owns only a portion of a wetland shall document the applicant's percentage of ownership of that wetland and the percentage of that ownership that would be impacted.		
N/A		_	
17.	The impact of the proposed project on the values and functions of the total wetland or wetland complex.	_	
	project proposes minimal impacts.		

18. The impact upon the value of the sites included in the latest published edition of the National Register of Natural Landmarks, or sites eligible for such publication.
This project is not located in or near any of the following Natural Landmarks listed on the National Register; Lake Umbagaog, East Inlet and Floating Island, Pondicherry Wildlife Refuge, Franconia Notch, Nancy Brook Scenic Area, Heath Pond Bog, Madison Boulder, White Lake Pitch Pine Forest, Mount Monadnock, Rhododendron Natural Area, and Spuce Hole Bog.
19. The impact upon the value of areas named in acts of Congress or presidential proclamations as national rivers, national wilderness areas, national lakeshores, and such areas as may be established under federal, state, or municipal laws for similar and related purposes such as estuarine and marine sanctuaries.
None.
20. The degree to which a project redirects water from one watershed to another.
This project will not change any flow patterns.

Additional comments		
1		

Westmoreland NH

Region ID:

NH

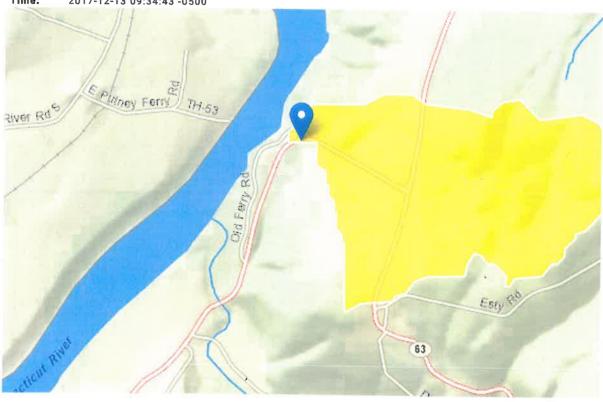
Workspace ID:

NH20171213143429402000

Clicked Point (Latitude, Longitude):

42.97983, -72.46085

Time: 2017-12-13 09:34:43 -0500



Section 405 Replace 30" CMP with 36" plastic

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.25	square miles
TEMP	Mean Annual Temperature	45.683	degrees F

NH Department of Transportation District 4 Westmoreland, #41691

Env-Wt 904.07 In-Kind Replacement of Tier 1 or Tier 2 Existing Legal Crossings

- In order to qualify under this section, the crossing cannot have a history of causing or contributing to flooding that damages the crossing or other infrastructure. Does the crossing have a history of flooding?

 The crossing does not have a history of flooding.
- The replacement stream crossing shall be the same size and type as the existing OR an upgrade. Please describe how this applies to the subject project.

 The current pipe is a 30" CMP, the plan is to install a 36" pipe to increase capacity and the ability of the pipe to transmit debris.

If the above criteria do not apply to this project, the crossing does not qualify under this section and must be designed according to 904.02 (Tier 1 crossings) or 904.05 (Tier 2 crossings).

If the above criteria apply to this project, please provide the following information.

The project may qualify as a minimum impact project if:

The crossing does not diminish the hydraulic capacity of the crossing. Upsizing the pipe from a 30" to a 36" will increase hydraulic capacity.

The crossing does not diminish the capacity of the crossing to accommodate aquatic life passage. The proposed work will not diminish the capacity or the crossing's ability to accommodate aquatic organism passage. There will be no loss of connectivity.

The crossing meets the general design criteria specified in Env-Wt 904.01, as follows:

Env-Wt 904.01

(a) Not be a barrier to sediment transport;

The larger pipe size will accommodate larger debris and sediment transport. No permanent barriers to sediment transport will be installed.

(b) Prevent the restriction of high flows and maintain existing low flows;

The increased pipe size will help flow in high flow times and low flows will be maintained as they are currently.

(c) Not obstruct or otherwise substantially disrupt the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction;

The pipe will not impede movement of aquatic life any more than the current pipe. Connectivity will be improved as the existing pipe is currently perched which will be addressed by a new pipe.

(d) Not cause an increase in the frequency of flooding or overtopping of banks;

The larger sized pipe will decrease the potential of flooding. The crossing currently does not flood or overtop its banks.

(e) Preserve watercourse connectivity where it currently exists;

The existing crossing is currently perched. Connectivity will be improved when the new pipe is set to eliminate this perch.

(f) Restore watercourse connectivity where: (1) Connectivity previously was disrupted as a result of human activity(ies); and (2) Restoration of connectivity will benefit aquatic life upstream or downstream of the crossing, or both; The existing crossing is currently perched. Connectivity will be improved when the new pipe is set to eliminate this perch.

(g) Not cause erosion, aggradation, or scouring upstream or downstream of the crossing; and None of the above is anticipated. Best Management Practices will be used to prevent any adverse effect to water quality during construction.

(h) Not cause water quality degradation.

No water quality changes are expected.

If the project does not qualify as a minimum impact project due to reasons stated above, it may qualify as a **minor** impact project if:

The crossing does not adversely impact the stability of the stream banks or stream bed upstream or downstream of the crossing. The project should not change stream bank stability.

The crossing does not cause an increase in the frequency of flooding or overtopping of banks. *The modifications should have no negative impacts on flooding.*

If the project does not meet the above criteria for minimum OR minor, the crossing does not qualify under this section and must be designed according to 904.02 (Tier 1 crossings) or 904.05 (Tier 2 crossings).

c:\documents and settings\n16cjp\desktop\stream xing reports\904 07.doc

Memo



To: Kevin Belanger, NHDOT Swanzey, NH 03446 19 Base Hill Rd

From:

Date: Amy Lamb, NH Natural Heritage Bureau 11/22/2017 (valid for one year from this date)

Review by NH Natural Heritage Bureau NHB File ID: NHB17-3394

Town: Westmoreland

Description: Replace an existing culvert under River Road

Location: just south of the intersection of River intersection road and the Northern Ferry Road

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results

listed below. Comments: Please send photos of the crossing and surrounding work area so that NHB can determine whether it contains habitat for the rare plants

shining ladies'-tresses (Spiranthes lucida)*	brook lobelia (<i>Lobelia kalmii</i>)*	balsam groundsel (Packera paupercula)*	Plant species	Natural Community Calcareous riverside seep
Ħ	H	H	State ¹	State ¹
I	Ĭ	1	Federal	Federal Notes Seep chang
This wetland species, which occurs in bogs, fens, seeps, and wet meadows, would be threatened by changes to local hydrology, including increased nutrient input from	This wetland species, which occurs in bogs/fens/seeps, and wet meadows, would be threatened by changes to local hydrology, including increased nutrient input from stormwater runoff, and sedimentation from nearby disturbance. It also occurs on river and streambanks, where the primary threats would be direct destruction of plants or their habitat.	This wetland species, which occurs in bogs, fens, and seeps, would be threatened by changes to local hydrology, including increased nutrient input from stormwater runoff, and sedimentation from nearby disturbances. It also occurs on river and streambanks, where the primary threats would be direct destruction of plants or their habitat.	Notes	Notes Seep communities are very sensitive to physical disturbance of their moist soils, to changes in local hydrology, and to increased inputs of sediments, pollutants, or nutrients.

Memo



Virginia stickseed (Hackelia virginiana)

-

their habitat.

This species is found in moist or dry woods, including floodplain forests. Threats would primarily be major alterations to their habitat.

stormwater runoff, and sedimentation from nearby disturbance. It also occurs on river and streambanks, where the primary threats would be direct destruction of plants or

¹Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

species. An on-site survey would provide better information on what species and communities are indeed present. information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on

NHB17-3394

Calcareous riverside seep

Legal Status

Conservation Status

Federal: Not listed Not listed State:

Global: Not ranked (need more information)

Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank:

Fair quality, condition and/or landscape context ('C' on a scale of A-D).

Comments on Rank:

2012: [Seep is lacking in diagnostic species.]

Detailed Description:

2012: Calcareous riverside seep plants, including originally documented rare plants, could not be relocated, including along some outcrop exposures near river level and on silty, seepy, sloughing alluvium that occupies most of the site. The outcrop areas extend about 40 m downstream from the silty seep area, and are dry and had no calciphiles, other than a single Scotch bellflower (Campanula rotundifolia). Erosion and deposition dynamics probably alter the location and expression of seeps on alluvium over time, such as the one at this site. This seep EO appears to be dominated by dense herbaceous vegetation now, including lots of invasive plants. Associated species include field horsetail (Equisetum arvense), knotted rush (Juncus nodosus), Brown mosses(Amblistegiaceae), rush (Juncus sp.), New York Americanaster (Symphyotrichum novi-belgii), stiff three-petaled bedstraw (Galium tinctorium), purplestemmed American-aster (Symphyotrichum puniceum), common grass-leaved-goldenrod (Euthamia graminifolia), Canada goldenrod (Solidago canadensis), pointed broom sedge (Carex scoparia), black-girdled bulrush (Scirpus atrocinctus), American wild mint (Mentha canadensis), red-osier dogwood (Swida sericea), yellow-seeded false pimpernel (Lindernia dubia var. dubia), common soapwort (Saponaria officinalis). Invasive species include purple loosestrife (Lythrum salicaria), European alder (Alnus glutinosa), Morrow's honeysuckle (Lonicera morrowii), creeping yellow-loosestrife (Lysimachia nummularia), coltsfoot (Tussilago farfara), and glossy false buckthorn (Frangula alnus). Steep slope, with the seep restricted to the lower half of the riverbank(about 12-15 feet elevation range).1994: No details. 1988: Characteristic species include Senecio pauperculus (dwarf ragwort), Equisetum variegatum (variegated horsetail), Lobelia kalmii (Kalm's lobelia), and Spiranthes lucida (shining ladies'-tresses).

General Area:

1988: Bedrock.

General Comments: Management

1988: No evidence of (human) disturbance. 1988: Development above may threaten.

Comments:

Location

Survey Site Name: Replete Seep

Managed By:

County: Cheshire Town(s): Westmoreland

Size:

.0 acres

Elevation:

220 feet

Precision:

Within (but not necessarily restricted to) the area indicated on the map.

Directions:

1994: At riverside outcrop WNW of house at 6 Ferry Road. 1988: Northwest of Park Hill where road

bends near the Connecticut River. Where the river straightens out after a large bend.

Dates documented

First reported:

1988

Last reported:

2012-07-11

balsam groundsel (Packera paupercula)

Legal Status

Conservation Status

Federal:

Not listed

Global: Demonstrably widespread, abundant, and secure

State:

Listed Threatened

Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank:

Historical records only - current condition unknown.

Comments on Rank:

Small population and small habitat, but seems to be maintaining itself at this site over time.

Detailed Description:

2012: Searched for, not found. 2003: Searched for but not found. 2001: Searched for but not

found. 1994: 82 vegetative plants and 14 in flower. 1988: 11-50 plants, had flowered.

General Area:

2003 (Not found): Much of the seep was overgrown with and dominated by purple loosestrife (Lythrum salicaria), multiflora rose (Rosa multiflora) and other woody vegetation.1994: Calcareous riverside seep. Small seepy outcrop, 28-42 degree slope. Exposed bedrock. Associated species include Fragaria virginiana (wild strawberry), Lespedeza sp. (bush-clover), Lythrum salicaria (purple loosestrife), Amphicarpaea bracteata (hog-peanut), Juncus sp. (rush), and Campanula rotundifolia (harebell). 1988: Riverside seep. Moist mid- to lower slope, open light. Associated species include Lobelia kalmii (Kalm's lobelia), Spiranthes lucida (shining ladies'-tresses), and Campanula rotundifolia (harebell). Another rare species found at this site is Equisetum variegatum (variegated

General Comments:

2001: Not certain that search was conducted in the right location. Looked for but did not find Spiranthes lucida (shining ladies'-tresses), Equisetum variegatum (variegated horsetail), or

Senecio pauperculus (dwarf ragwort). 1988: Accessed by canoe.

Management Comments:

2003 (Not found): Seep overgrown by invasives; possible excavation/erosion.1994: Monitor.

Reduce erosion potential from land use above.

Location

Survey Site Name: Replete Seep

Managed By:

County: Cheshire Town(s): Westmoreland Size:

.5 acres

Elevation:

220 feet

Precision:

Within (but not necessarily restricted to) the area indicated on the map.

Directions:

2003 (Not found.): From Rte. 9, take Rte. 63 north through town of Westmoreland, through the village of Park Hill. Just past Park Hill turn left on River Road. Go down hill, as road bends to the left a dirt road (Ferry Road) goes straight ahead and there is a driveway on the right for #6 Ferry Road. Turn down driveway, go to house. With landowner permission, park and walk down to river. Replete Seep begins on the north side of the landowner's property (where his boat launch is) and stretches downstream for several hundred yards.1994: Connecticut River about 0.5 miles north of Partridge Book. At small seepy riverside outcrop due WNW of a house at 6 Ferry Road. Canoe access is best unless landowner contacted.1988: Northwest of Park Hill where road bends near the

river. Where river straightens out after a great bend.

Dates documented

First reported:

1988-07-27

Last reported:

1994-06-28

brook lobelia (Lobelia kalmii)

Legal Status

Conservation Status

Federal: Not listed

Global: Demonstrably widespread, abundant, and secure

State: Listed Threatened

Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank:

Historical records only - current condition unknown.

Comments on Rank:

2008: Not found since first observation in 1988 despite multiple attempts.

Detailed Description:

2012: Searched for, not found. 2008: Searched for but not found. 2004: Searched for but not found. 2003: Searched for but not found. 2001: Searched for but not found. 1994: Searched

for but not found. 1988: 11-50 plants.

General Area:

1988: Riverside seep. Bedrock. With Spiranthes lucida (shining lady's-tresses). Moist mid-

to lower slope with open light.

General Comments:

Management Comments:

Location

Survey Site Name:

Replete Seep

Managed By:

County:

Cheshire Westmoreland

Town(s): Size:

.5 acres

Elevation:

220 feet

Precision:

Within (but not necessarily restricted to) the area indicated on the map.

Directions:

1988: At riverside outcrop WNW of a house at 6 Ferry Road. Northwest of Park Hill where road

bends near the Connecticut River and river straightens out. Surveyed from a canoe.

Dates documented

First reported:

1988

Last reported:

1988-07-27

shining ladies'-tresses (Spiranthes lucida)

Legal Status

Conservation Status

Federal:

Not listed

Global: Apparently secure but with cause for concern

State:

Listed Endangered

Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank:

Historical records only - current condition unknown.

Comments on Rank:

1988: Small seep.

Detailed Description:

2012: Searched for, not found. 2008: Searched for but not found. 2004: Searched for but not found. 2003: Searched for but not found. 2001: Searched for but not found. 1994: Searched

for but not found. 1988: 11-50 fruiting plants.

General Area:

1988: Calcareous riverside seep. Exposed bedrock. Moist mid- to lower slope, open light.

Other rare species present include Lobelia kalmii (Kalm's lobelia), Equisetum variegatum

(variegated horsetail), and Senecio pauperculus (dwarf ragwort).

General Comments:

2003: Erosion and possibly some excavation may have also altered seep.

Management Comments:

2008: Large numbers of invasive plants, in some areas 100% cover, including honeysuckle (Lonicera sp.), buckthorn (Rhamnus sp.), bittersweet (Celastrus sp.), Japanese knotweed (Fallopia japonica), crown vetch (Coronilla varia), and purple loosestrife (Lythrum salicaria).2003: Much of the seep is overgrown with and dominated by purple loosestrife (Lythrum salicaria), multiflora rose (Rosa multiflora), and other woody vegetation. Some

intact areas exist, but they are extremely small.

Location

Survey Site Name: Replete Seep

Managed By:

County: Cheshire Town(s):

Westmoreland

Size:

.5 acres

Elevation:

220 feet

Precision:

Within (but not necessarily restricted to) the area indicated on the map.

Directions:

1988: Riverside outcrop WNW of a house at 6 Ferry Road. Northwest of Park Hill where road bends

near the river, and river straightens out.

Dates documented

First reported:

1988-07-27

Last reported:

1988-07-27

Virginia stickseed (Hackelia virginiana)

Legal Status

Conservation Status

Federal:

Not listed

Global: Demonstrably widespread, abundant, and secure

State: Listed Threatened

State: Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank:

Not ranked

Comments on Rank:

Detailed Description:

1997: No details.

General Area:

1997: Associated species include Ulmus rubra (slippery elm) and Toxicodendron radicans

(poison ivy).

General Comments:

Management Comments:

Location

Survey Site Name:

Partridge Brook

Managed By:

Cheshire County Farm

County:

Cheshire

Town(s):

Westmoreland

Size:

2.8 acres

Elevation:

230 feet

Precision:

Within (but not necessarily restricted to) the area indicated on the map.

Directions:

[From Westmoreland take Rte. 63 north ca. 1.5 miles to left turn on River Road. Continue south ca.

0.7 miles to bridge over Partridge Brook.] Site is on north side of bridge, west side of the road.

Dates documented

First reported:

1997

Last reported:

1997

Urban, Matt

From:

Lamb, Amy

Sent:

Friday, December 01, 2017 9:17 AM

To:

Urban, Matt

Subject:

RE: NHB review: NHB17-3394

Hi Matt,

Thank you for sending the photos and the draft plan. The photos of the culvert and surrounding environment seem to indicate eroding, previously disturbed soils dominated by invasive vegetation. Since the proposed work will be restricted to the areas immediate to the culvert inlet and outlet, I do not have concerns about this project impacting rare plants.

Best, Amy

Amy Lamb Ecological Information Specialist (603) 271-2215 ext. 323 amy.lamb@dncr.nh.gov

NH Natural Heritage Bureau

DNCR - Forests & Lands

172 Pembroke Rd

Concord, NH 03301

Please note: DRED no longer exists; NHB is now part of the **Department of Natural and Cultural Resources (DNCR)**. Please update your address book with my new email address.

From: Urban, Matt

Sent: Monday, November 27, 2017 2:39 PM

To: Lamb, Amy **Cc:** Large, Sarah

Subject: FW: NHB review: NHB17-3394

Hi Amy,

Lam following up with photos of a project area that you recently requested for one of our District projects.

Let me know if you have any concerns for the species you have identified based on the photos provided.

If you need the original photos let me know and I will reach out to Kevin Belanger to see if he can send me the actual jpeg images.

I have also attached a draft plan so you can get a sense of the limited work area we will be impacting.

Let me know if you have questions.

Thanks,

Matt

From: Belanger, Kevin

Sent: Monday, November 27, 2017 6:49 AM

To: Urban, Matt **Cc:** Large, Sarah

Subject: FW: NHB review: NHB17-3394

OK,

Here is the NHB file.

Not sure what all that means to my project??

Kevin

From: Lamb, Amy

Sent: Wednesday, November 22, 2017 2:34 PM

To: Belanger, Kevin

Subject: NHB review: NHB17-3394

Attached, please find the review we have completed. If your review memo includes potential impacts to plants or natural communities please contact me for further information. If your project had potential impacts to wildlife, please contact NH Fish and Game at the phone number listed on the review.

Best, Amy

Amy Lamb Ecological Information Specialist

NH Natural Heritage Bureau DNCR - Forests & Lands 172 Pembroke Rd Concord, NH 03301 603-271-2215 ext. 323



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Ecological Services Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5094 Phone: (603) 223-2541 Fax: (603) 223-0104

http://www.fws.gov/newengland



December 19, 2017

In Reply Refer To:

Consultation Code: 05E1NE00-2018-SLI-0551

Event Code: 05E1NE00-2018-E-01272 Project Name: Westmoreland 41691

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the

human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan

(http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5094 (603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2018-SLI-0551

Event Code:

05E1NE00-2018-E-01272

Project Name:

Westmoreland 41691

Project Type:

TRANSPORTATION

Project Description: District 4 is replacing an existing failing 30" cmp on River Road with a new 36" plastic pipe of the same length. They will install a stone splash

pad at the outlet of the new pipe.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/42.97987720137678N72.46093348511161W



Counties:

Cheshire, NH

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

Mammals

NAME

STATUS

Northern Long-eared Bat Myotis septentrionalis

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045

Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Note to File - Northern Long-eared Bat (NLEB)

The Army Corps of Engineers (ACOE) has indicated to the NH Department of Transportation (NHDOT) that for projects that can meet the following parameters the applicant will not need to submit the 4(d) consultation form. The ACOE has also indicated that they will be able to make an effect determination based on the ancillary information provided within a standard dredge and fill wetlands application so long as the answer to the parameters below are "No" or that "These actions are not a part of the proposed work".

Parameters:

- 1. Are Trees 3" and greater in diameter being cut "in the project area."
- 2. Will there be disturbance to riprap "associated with an existing dam."
- 3. Does work consist of disturbance to the substructure (underneath) of a "bridge?" This does not include small culverts where the NLEB could not possibly live due to low habitat conditions.

In regards to the Westmoreland, #41691 project, based on the scope of work, the project will not affect NLEB. The proposed work will not remove any trees greater than 3" diameter at breast height. There is no rip-rap in association with a dam in proximity to this project. The existing culvert is a 30" cmp carrying an unnamed stream under River Road in Westmoreland. Work consists of replacing the 30" cmp with a new 36" plastic pipe of the same length. The existing culvert is very small and is unlikely that it is suitable habitat for NLEB. Additionally, there are no known hibernacula in Grantham based on coordination with US Fish & Wildlife and no hits came back for NLEB from the NHB search, therefore no identified maternity root trees are within the project limits.

Northern Long-Eared Bat 4(d) Rule Streamlined Consultation Form

Federal agencies should use this form for the optional streamlined consultation framework for the northern long-eared bat (NLEB). This framework allows federal agencies to rely upon the U.S. Fish and Wildlife Service's (USFWS) January 5, 2016, intra-Service Programmatic Biological Opinion (BO) on the final 4(d) rule for the NLEB for section 7(a)(2) compliance by: (1) notifying the USFWS that an action agency will use the streamlined framework; (2) describing the project with sufficient detail to support the required determination; and (3) enabling the USFWS to track effects and determine if reinitiation of consultation is required per 50 CFR 402.16.

This form is not necessary if an agency determines that a proposed action will have no effect to the NLEB or if the USFWS has concurred in writing with an agency's determination that a proposed action may affect, but is not likely to adversely affect the NLEB (i.e., the standard informal consultation process). Actions that may cause prohibited incidental take require separate formal consultation. Providing this information does not address section 7(a)(2) compliance for any other listed species.

IPaC Official Species List Consultation Code:

Information to Determine 4(d) Rule Compliance:	YES	NO
1. Does the project occur wholly outside of the WNS Zone ¹ ?		X
2. Have you contacted the appropriate agency ² to determine if your project is near known hibernacula or maternity roost trees?	X	
3. Could the project disturb hibernating NLEBs in a known hibernaculum?		X
4. Could the project alter the entrance or interior environment of a known hibernaculum?		X
5. Does the project remove any trees within 0.25 miles of a known hibernaculum at any time of year?		X
 Would the project cut or destroy known occupied maternity roost trees, or any other trees within a 150-foot radius from the maternity roost tree from June 1 through July 31. 		X

You are eligible to use this form if you have answered yes to question #1 or yes to question #2 and no to questions 3, 4, 5 and 6. The remainder of the form will be used by the USFWS to track our assumptions in the BO.

Agency and Applicant³ (Name, Email, Phone No.): Sarah Large sarah.large@dot.nh.gov, (603) 271-6916

Project Name: Westmoreland, #41691

Project Location (include coordinates if known): 42.979906, -72.460788

Basic Project Description (provide narrative below or attach additional information): Replace an existing failing 30" cmp on River Road with a new 36" plastic pipe of the same length. Install a stone splash pad at the outlet of the new pipe.

¹ http://www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf

² See http://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html

³ If applicable - only needed for federal actions with applicants (e.g., for a permit, etc.) who are party to the consultation.

General Project Information	YE S	NO
Does the project occur within 0.25 miles of a known hibernaculum?		×
Does the project occur within 150 feet of a known maternity roost tree?		\boxtimes
Does the project include forest conversion ⁴ ? (if yes, report acreage below)		\boxtimes
Estimated total acres of forest conversion		•
If known, estimated acres ⁵ of forest conversion from April 1 to October 31		-
If known, estimated acres of forest conversion from June 1 to July 31 ⁶		
Does the project include timber harvest? (if yes, report acreage below)		\boxtimes
Estimated total acres of timber harvest		
If known, estimated acres of timber harvest from April 1 to October 31		
If known, estimated acres of timber harvest from June 1 to July 31		
Does the project include prescribed fire? (if yes, report acreage below)		\boxtimes
Estimated total acres of prescribed fire		
If known, estimated acres of prescribed fire from April 1 to October 31		
If known, estimated acres of prescribed fire from June 1 to July 31		
Does the project install new wind turbines? (if yes, report capacity in MW below)		\boxtimes
Estimated wind capacity (MW)		

Agency Determination:

By signing this form, the action agency determines that this project may affect the NLEB, but that any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule.

If the USFWS does not respond within 30 days from submittal of this form, the action agency may presume that its determination is informed by the best available information and that its project responsibilities under 7(a)(2) with respect to the NLEB are fulfilled through the USFWS January 5, 2016, Programmatic BO. The action agency will update this determination annually for multi-year activities.

The action agency understands that the USFWS presumes that all activities are implemented as described herein. The action agency will promptly report any departures from the described activities to the appropriate USFWS Field Office. The action agency will provide the appropriate USFWS Field Office with the results of any surveys conducted for the NLEB. Involved parties will promptly notify the appropriate USFWS Field Office upon finding a dead, injured, or sick NLEB.

Signature: Sarah	& Larg	Date Submitted: 1/5/19	3
		Date Submitted.	

⁴ Any activity that temporarily or permanently removes suitable forested habitat, including, but not limited to, tree removal from development, energy production and transmission, mining, agriculture, etc. (see page 48 of the BO).

⁵ If the project removes less than 10 trees and the acreage is unknown, report the acreage as less than 0.1 acre.

⁶ If the activity includes tree clearing in June and July, also include those acreage in April to October.

Project_	Westmoreland 41691

Wetland Application - NHDOT Cultural Resources Review

For the purpose of compliance with regulations of the National Historic Preservation Act, the Advisory Council on Historic Preservation's *Procedures for the Protection of Historic Properties* (36 CFR 800), the US Army Corps of Engineers' *Appendix C*, and/or state regulation RSA 227-C:9, *Directive for Cooperation in the Protection of Historic Resources*, the NHDOT Cultural Resources Program has reviewed the enclosed Standard Dredge and Fill Application for potential impacts to historic properties.

Proposed Project: District 4, Section 405; Location of existing culvert carrying unnamed stream under River Road; replace existing failing 30" CMP with 36" plastic pipe of same length to increase capacity and ability to transmit debris. Install stone splash pad at outlet of new pipe.

Location is east of Old Ferry Road and Connecticut river, and northwest of Park hill, WNW of house at 6 Ferry Rd; unnamed stream is tributary that flows to Connecticut River

Above Ground Review	
Known/approximate age of structure:	
☑ No Potential to Cause Effect/No Concerns CMP	
☐ Concerns:	
Below Ground Review	
Recorded Archaeological site: ☐Yes ☐No	
Nearest Recorded Archaeological Site Name & Number: Cl ☑Pre-Contact ☐Post-Contact	hickering Farm Site 27-CH-0084
Distance from Project Area: 5.44 miles (8.76 km) southwest Connecticut River	st of project area; on east bank of
 ☑ No Potential to Cause Effect/No Concerns Based on scope, proposed work is restricted to areas immedia removal of trees greater than 3" diameter; in area of riverside photos indicate eroded and previously disturbed soils with inv ☐ Concerns: 	within silty, seepy, sloughing alluvium;
Reviewed by:	
Spice Charles	1/4/2018
NHDOT Cultural Resources Staff	Date:



U.S. Army Corps of Engineers New Hampshire Programmatic General Permit (PGP) Appendix B - Corps Secondary Impacts Checklist (for inland wetland/waterway fill projects in New Hampshire)

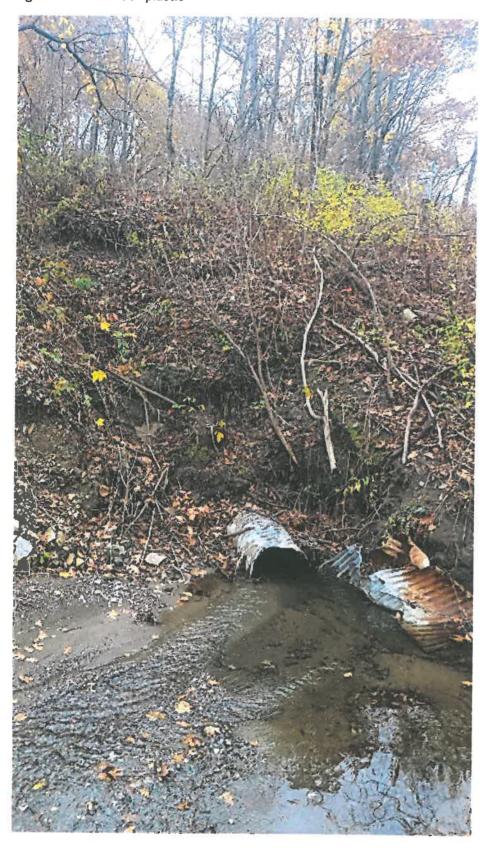
- 1. Attach any explanations to this checklist. Lack of information could delay a Corps permit determination.
- 2. All references to "work" include all work associated with the project construction and operation. Work includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.
- 3. See PGP, GC 5 regarding single and complete projects.
- 4. Contact the Corps at (978) 318-8832 with any questions.

1. Impaired Waters	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See		X
http://des.nh.gov/organization/divisions/water/wmb/section401/impaired waters.htm		
to determine if there is an impaired water in the vicinity of your work area.*		
2. Wetlands	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?	Х	
2.2 Are there proposed impacts to SAS, shellfish beds, special wetlands and vernal pools (see		X
PGP, GC 26 and Appendix A)? Applicants may obtain information from the NH Department of		
Resources and Economic Development Natural Heritage Bureau (NHB) website,		
www.nhnaturalheritage.org, specifically the book Natural Community Systems of New		
Hampshire.		
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology,	X	
sediment transport & wildlife passage?		
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent		X
to streams where vegetation is strongly influenced by the presence of water. They are often thin		
lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream		
banks. They are also called vegetated buffer zones.)		
2.5 The overall project site is more than 40 acres.		X
2.6 What is the size of the existing impervious surface area?		
2.7 What is the size of the proposed impervious surface area?		
2.8 What is the % of the impervious area (new and existing) to the overall project site?		-
3. Wildlife	Yes	No
3.1 Has the NHB determined that there are known occurrences of rare species, exemplary natural	X	
communities, Federal and State threatened and endangered species and habitat, in the vicinity of		
the proposed project? (All projects require a NHB determination.)	_	
3.2 Would work occur in any area identified as either "Highest Ranked Habitat in N.H." or		X
"Highest Ranked Habitat in Ecological Region"? (These areas are colored magenta and green,		
respectively, on NH Fish and Game's map, "2010 Highest Ranked Wildlife Habitat by Ecological		
Condition.") Map information can be found at:		
• PDF: www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm.		
• Data Mapper: www.granit.unh.edu.		
• GIS: www.granit.unh.edu/data/downloadfreedata/category/databycategory.html.		
3.3 Would the project impact more than 20 acres of an undeveloped land block (upland,		x
wetland/waterway) on the entire project site and/or on an adjoining property(s)?		
	T.	X
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?		28

4. Flooding/Floodplain Values	Yes	No
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?		Х
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?		
5. Historic/Archaeological Resources		
If a minor or major impact project, has a copy of the Request for Project Review (RPR) Form (www.nh.gov/nhdhr/review) been sent to the NH Division of Historical Resources as required on Page 5 of the PGP?**	х	

^{*}Although this checklist utilizes state information, its submittal to the Corps is a Federal requirement.

** If project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law.



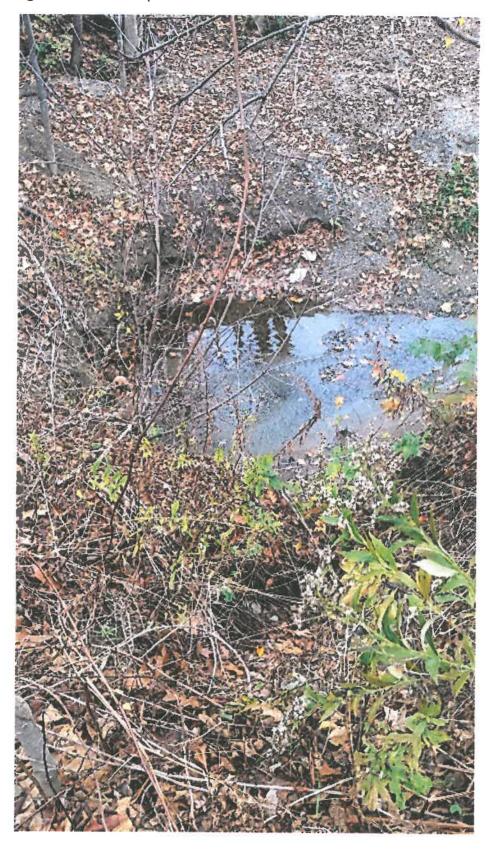
Pipe inlet.



36" pipe under Ferry road just upstream.



Looking south on River Road.



Looking at pipe inlet from Road.



Looking at pipe outlet from road.



Pipe outlet, bottom of pipe rotted out.

New Hampshire Department of Transportation Bureau of Highway Maintenance, Project # 41691 Westmoreland

Construction Sequence

- 1. Install erosion control measures upstream and downstream (silt socks, sand bags, etc.). If water flow exists, dam the flow and pump around the work area as needed.
- 2. Close road and remove existing 30" CMP.
- 3. Prepare sub-grade and install new 36" plastic pipe.
- 4. Build Stone headwalls, backfill and make safe for traffic. Open road to traffic.
- 5. Finish slopes with humus, seed and mulch.
- 6. Prepare sub grade for paving utilizing flaggers and alternating traffic, pave binder.
- 7. Pave top.
- 8. Maintain erosion control measures until slopes are stabilized.

Note:

